

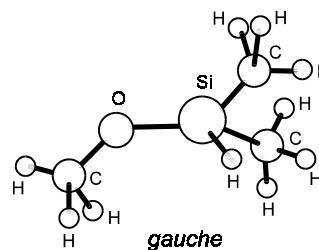
1431
ED

C₃H₁₀OSi

Methoxydimethylsilane

C₁ (*gauche*)
H₃C–O–SiH(CH₃)₂

r_a	\AA^a	θ_α	deg^a
Si–O	1.642(3)	C–O–Si	125.2(15)
C–O	1.425(6)	O–Si–C	111.1(9)
Si–C	1.866(3)	C–Si–C	113.1(19)
C–H	1.118(5)	Si–C–H	109.8(21)
Si–H	1.487 ^{b)}	O–C–H	106.6(24)
		O–Si–H	109 ^{b)}
		ϕ^c	78(10)



The main (or the only) conformer has a *gauche* form, but the results do not exclude the presence of up to 30% of the *anti* form. Local C_{3v} symmetry for the methyl groups was assumed. The temperature of the measurement was 25 °C.

^{a)} Three times the estimated standard errors.

^{b)} Assumed.

^{c)} Torsional angle H–Si–O–C from the *syn* position.

Rusaeva, O.A., Mastryukov, V.S., Khristenko, L.V., Vilkov, L.V., Pentin, Yu.A.: Zh. Fiz. Khim. **65** (1991) 152; Russ. J. Phys. Chem. (Engl. Transl.) 65 (1991) 77.